

## CLAIMS

1. A print method for a colour ink-jet printer  
5       (1) of the type comprising at least four ink cartridges  
      (2) each containing a basic colour chosen from amongst  
         yellow (J), magenta (M), cyan (C) and black (K) and at  
         least one supplementary cartridge containing an ink of  
10      a so-called pale basic colour, and in which a print  
         instruction (4) is received containing information  
         relating to the requested colour (CD) and/or to the  
         number and colour of the ink drops (ED) to be deposited  
         on one another at a given location referred to as a  
         pixel (Pi) of a chosen print medium (5), characterised  
15      in that it also comprises an optimisation mode in  
         which, according to a pre-established correspondence,  
         the requested colour (CD) and/or the required number  
         and colour of the drops to be superimposed (ED) in  
         order to obtain a chosen colour at a given pixel (Pi)  
         is made to correspond to an equivalent colour (CE)  
20      and/or an equivalent number and colour of the drops to  
         be superimposed (EE) making it possible to obtain a  
         substantially equivalent and satisfactory colour  
         rendition in accordance with the sensory response of  
         the human eye, and in that the equivalent colour (CE)  
25      and/or the equivalent number and colour of the droplets  
         to be superimposed (EE) thus determined are applied to  
         the printer (1) for each printed instruction received.

30      2. A method according to Claim 1, in which the  
         colours used belong to the group formed by yellow (J),  
         magenta (M), cyan ©, black (K), pale magenta (Mpale),

pale cyan ( $C_{pale}$ ), and pale black ( $K_{pale}$ ), characterised in that the equivalent number of drops to be superimposed (EE) is less than the required number of drops to be superimposed (ED).

5       3. A method according to Claim 2, in which the printer (1) comprises six to eight ink cartridges, characterised in that the equivalent number of droplets to be superimposed is less than or equal to three or four.

10      4. A method according to one of Claims 1 to 3, characterised in that the optimisation mode comprises several correspondence levels.

15      5. A colour ink-jet printer of the type comprising at least four ink cartridges (2) each containing a basic colour chosen from amongst yellow (J), magenta (M), cyan (C), and black (K) and at least one supplementary cartridge containing an ink of a so-called pale basic colour and processing means (3,7) able to receive a print instruction (4) containing  
20 information relating to the requested colour (CD) and/or to the number and colour of the ink drops (ED) to be deposited on one another at a given location referred to as a pixel ( $P_i$ ) of a chosen print medium (5), characterised in that the processing means (3,7)  
25 comprise an optimisation mode in which they are able to make the requested colour (CD) and/or the required number and colour of the droplets to be superimposed (ED) in order to obtain a chosen colour at a given pixel ( $P_i$ ) correspond to an equivalent colour (CE)  
30 and/or an equivalent number and colour of the droplets

to be superimposed (EE) making it possible to obtain a substantially equivalent and satisfactory colour rendition in accordance with the sensory response of the human eye, and to apply to the printer (1) the equivalent colour (CE) and/or the equivalent number and colour of the droplets to be superimposed (EE) thus determined for each print instruction received.

6. A printer according to Claim 5, characterised in that the correspondence is established according to 10 a pre-established law or table of correspondence (TAB).

7. Software intended to drive a colour ink-jet printer (1) of the type comprising at least four cartridges each containing a basic colour chosen from amongst yellow, magenta, cyan and black and a 15 supplementary cartridge containing an ink of a so-called pale basic colour, the said software comprising instruction codes able to process a print instruction comprising information relating to the requested colour (CD) and/or the required number and colour of ink drops 20 to be superimposed (ED) in order to obtain the requested colour at a given pixel of a chosen print medium, characterised in that the instruction codes of the software are able to make the requested colour (CD) and/or a required number and colour of the droplets to 25 be superimposed (ED) in order to obtain the requested colour at the said pixel to correspond to an equivalent colour (CE) and/or an equivalent number and colour of droplets to be superimposed (EE) making it possible to obtain a substantially equivalent and satisfactory 30 colour rendition in accordance with the sensory

response of the human eye, and to apply to the printer the equivalent colour and/or the equivalent number and colour of droplets to be superimposed thus determined for each print instruction received.

5        8. A storage medium containing the instruction codes of the software according to Claim 7.